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CROSS-SECTORAL ISSUES

Utilization of economic instruments

Progress Report of the Secretary-General of the Conference

INTRODUCTION

1. This paper was prepared in response to the Decision 1/25 taken by the Preparatory Committee at its first session requesting the Secretary-General for a report underlining the close interrelationship between environment and development. It deals with the relationship between environment, development, and market mechanisms referred to in Decision 1/25. The role of economic instruments was subsequently identified as a major cross cutting issue in discussion at the Second Preparatory Conference.

2. The report has been prepared on the basis of information available to the Secretariat on this subject and the deliberations of the Working Groups. It should be read in conjunction with other papers prepared by the Secretariat in response to Decision 1/25 and the progress report on financial resources.

3. It has been prepared as a background paper to assist in drawing conclusions about how the role of economic instruments and market mechanisms should be incorporated in preparations for the 1992 Conference.

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I. CONTEXT: THE GROWING IMPORTANCE OF ECONOMIC INSTRUMENTS

a) The integration of environmental and economic decision making

4. When the environment emerged as an important public issue in the early 1970's, most governments responded by creating environmental agencies and ministries. These were given powers, often extensive ones, to regulate activity detrimental to the environment but typically had little role in economic or sectoral policies.

5. This approach led to considerable success in dealing with certain environmental problems over the past 20 years. However as the 1987 report of the Brundtland Commission made clear, traditional approaches have not been sufficient:

- Economic growth and protection of the environment should be pursued as complementary and interrelated goals (i.e.the concept of sustainable development;

- Economic and environmental objectives need to be much more closely integrated in decision making processes than in the past.

6. The series of recommendations for integration of the environment and the economy which the Commission produced subsequently provided the basis for the decision to hold the United Nations Conference on Environment and Development in Rio de Janeiro, Brazil in 1992.

7. This fundamental issue of the relationship between the environment and our economic life will therefore be the prime focus of the 1992 Conference. A key challenge in this context will be to determine how taxes, incentives, subsidies and other instruments of economic and fiscal policy can be reexamined to ensure that they meet both environmental and economic objectives.

b) The emergence of interest in economic instruments and market oriented approaches

8. During the past several years there has also been a growing interest in the potential role of the levers of economic and fiscal policy to deal with environment and development problems, as these become the business of finance, trade, economic, energy and other ministers as well as ministers responsible for the environment.

9. Generally speaking, there are three possible ways in which governments can influence environmental behaviour: they can use law and regulation to lay down rules on performance standards to be met and even the means by which this is to be achieved; they can work with industry and the public to encourage action on a voluntary basis; or they can use the levers of fiscal and economic policy and the marketplace to influence the behaviour of producers and consumers.

Regulation

10. Traditionally governments have relied primarily on regulation, or as it is sometimes known the "command and control" approach. This has the advantage of setting clear goals against which progress can be monitored and evaluated. It has served most countries well, and seems likely to remain an important part of most environment and development strategies.

11. However regulation can have the disadvantage of being an inflexible, relatively expensive and not always efficient way of meeting environmental objectives. There is also an emerging view that regulation has probably reached its limits in some countries and in efforts to deal with some problems, and that many of problems may indeed be attributable to over reliance on regulation. Regulation can also be difficult to enforce particularly in countries without the necessary institutional and cultural tradition needed to ensure compliance.

Voluntary action

12. Voluntary approaches based on persuasion and negotiation have some role, especially as industry become more conscious that good environmental practices can also mean good business, and with the emergence of a more environmentally sensitive public.

13. However such approaches, sometimes also referred to as "self regulation", are unlikely to be effective without a clear framework of expectations and requirements within which to operate or market signals which reflect enviromental values and objectives.

Economic instruments

14. Some governments have therefore been turning increasingly to the levers of economic and fiscal policy to achieve their objectives. Such approaches have the advantage of leaving decisions on the most cost effective was of dealing with pollution and allocating scarce resource to producers and consumers rather than regulators, and working with rather than against the forces of the market place.

- While use of this approach is still limited, the last few years have seen an expansion of environmental charges and taxes, tradeable permits systems and other measures to deal with an expanding range of environmental problems in industrialized countries;

- There is an emerging interest in developing countries in the role economic and market based approaches can play in encouraging environmentally sound development strategies;

- The role of market-oriented environmental policies in the process of transition to market-based economies has become an important concern in the USSR and central and eastern Europe;

- The possible international application of two kinds of economic instruments - carbon taxes and tradeable permits systems - in dealing with the global warming issue is also being examined in the context of the Climate Change negotiations.

15. The potential role of economic instruments in improving approaches to a range of environmental issues is under examination by a number of countries, as well as international organizations and international banks. Special studies have been undertaken by several governments, including Sweden, Norway, Finland, the Netherlands, Canada, the United States, and the United Kingdom.

16. Interest in the use of economic instruments and market-oriented approaches has also been reflected in a growing number of recent international statements and declarations. A list of these is attached as an Annex.

II. THE RATIONALE FOR ECONOMIC INSTRUMENTS

17. The growth of interest in the role of economic instruments reflects a range of factors, both theoretical and practical.

a) The economics of sustainable development

18. From the point of view of environmental economics, economic instruments have an important role to play in ensuring that environmental considerations are properly reflected in decision making and in rationalizing the use of scarce resources.

Recognizing the significance of prices

19. It is clear from everyday experience that behaviour on the part of both producers and consumers is determined not only by law and regulation but by differences in prices. If prices reflect the full costs of activities, the market place ensures that economic needs and aspirations are met in the most efficient way. This underlines the need for finding new ways of moving toward price signals that better reflect environmental costs and benefits.

20. This concern has been recognized widely in the work of economists and increasingly by governments and international organizations.

21. The OECD in its publication on the Economics of Sustainable Development said that "possibly the most important factor in an effective pursuit of sustainable development is 'getting the price right'. Unless prices for raw materials and products properly reflect the social costs, and unless prices can be assigned to air, water and land resources that presently serve as cost-free receptacles for the waste products of society, resources will tend to be used inefficiently and environmental pollution will likely increase."

22. Similarly, the Asian Development Bank in its recent publication on Economic Policies for Sustainable Development based on studies in seven Asian countries stated that "pricing policies are recognized in theory as a p, perhaps even an essential, ally of regulatory measures; there is a need to

test this idea more fully in practice." It also noted that so many instances of environmental results from price policies are reported in the seven country studies that it would be wise for all member countries to undertake a disciplined review of major price structures with a view to identifying situations where a change in present practices could have a beneficial impact on the environment."

Internalizing environmental values

23. It is also generally recognized that one of the main causes of environment and development problems has been failure in the past to take the costs associated with environmental values sufficiently into account in economic decision making.

24. This involves the problem of so-called "externalities". In what was known until the late 1960's as a "curiosum" in economic theory, environmental values and their associated social costs were assumed not to enter into the decision making equation. Instead, they were regarded as secondary considerations, to be shifted onto other parts of society or onto future generations. The inability of markets to take care of externalities arises essentially from the fact that market behaviour is dominated by private costs and benefits, and costs or benefits associated with externalities are ignored.

25. Attaching a price tag to environmental values can admittedly be difficult, particularly in some cases. However where this can be done or approximated, charges, taxes, pricing mechanisms and other economic measures can play an important role in internalizing such costs by making them more apparent.

Drawing on market forces

26. Market forces and the role of the private sector have also emerged as an important driving force for sustainable development. While economic activity can have a degrading impact on the environment, it also generates much of the knowledge, technical and financial resources needed to deal with it effectively.

27. This underlines the need to tap the energies and creative power of the market place, and to give it the scope to do what it does best in terms of developing innovative and cost effective approaches to environment and development problems.

28. There is therefore a need for market signals which encourage environmentally friendly behaviour on the part of industry, and shifts toward investment in environmentally sound technologies. This also involves moving away from means moving away from confusing and overly prescriptive forms of regulation in favour of approaches which encourage industry initiative.

b) <u>More effective policy tools</u>

29. Interest in economic instruments has also been motivated by the need to develop more effective tools for dealing with a growing range of environment related problems.

Incorporating polluter and user pay principles

30. There has been a gradual acceptance over the past 20 years of the principle that those who pollute the environment should also bear the responsibility of cleaning it up. This principle has gained wide recognition in policy making circles in both industrialized and developing countries, as well as some centrally planned economies.

31. While some of these costs can be recovered through regulation, charges and taxes offer are potentially more effective because they are more likely to capture these costs at the prevention stage.

Removing disincentives and creating incentives

32. One of the major obstacles to the achievement of sustainable development is present structure of subsidy, tax and pricing policies which exist in varying degrees in virtually all countries.

33. Such measures frequently serve as disincentives to environmentally friendly behaviour by providing access to resources at less than their full marginal cost of production, thereby encouraging overuse and the eventual degradation of the resource. They also tend to cause distortions in markets, as well as a drain on government budgets.

34. These policies are often put in place for social or other reasons and are not always easy to change. However the transition to sustainable development calls for long term strategies to gradually eliminate, reduce or redirect such policies in favour of structures which serve as incentives and rewards for environmentally sound behaviour.

Achieving cost effectiveness and economic efficiency

35. Regulation tends to be an expensive way of dealing with environmental concerns because it addresses their effects rather than their cause.

36. Economic instruments and market mechanisms have the potential help to achieve greater cost - efficiency, at a time when most governments are under stringent financial constraints:

- by allowing industry to choose the most efficient technology to meet required standards;
- by providing incentives to reduce pollution and encouraging the development of new environmentally friendly technologies;
- by offering greater flexibility to both industry and governments; and
- by generating revenue that can used to fund the growing cost of environmental programs.

37. In short, economic instruments can be regarded as an important way of shifting from policies which are bad for the environment and economic growth toward policies which mean both "good economics" and "good environment".

III. THE UTILIZATION OF ECONOMIC INSTRUMENTS: A SYNTHESIS OF AVAILABLE INFORMATION

38. During the past decade there has been a growing proliferation of environmental charges, taxes, tradeable permit systems and other economic measures designed to address environment and development problems. While their use is still limited, they are playing a growing role in the design of many countries' approaches to these issues.

39. The following is a brief overview of the main categories of such instruments with examples of how they are now being utilized, which has been been drawn from various documents and studies available to the Secretariat.

40. There are no precise definitions of what constitutes an economic instrument, and they tend to be used differently in different studies. Some studies have used the term in the context of improving approaches to environmental protection and pollution control, whereas some other studies have included broader applications of economic incentives to issues of environmental management and conservation.

41. These categories have been defined broadly to include all instruments which make use of economic or market principles to improve approaches to environment and development issues.

a) Resource Pricing

42. Governments influence prices in many ways: through subsidies, taxes, and direct price setting, as well as direct price setting, as well as the effect of the terms of trade, currency valuation, and the role of monopolies.

43. In recent years various actions have been taken to improve the efficiency of energy and the management of resources, including better pricing policies.

42. Moving toward resource pricing structures which reflect the full marginal social cost of resource use is a key to the development of sustainable development strategies for energy, water, agriculture, forestry and land. However it is an ideal concept and to date only limited use has been made of resource pricing as a conscious instrument of environmental policy.

b) Subsidies

45. Subsidies and other forms of financial support can have both positive and negative consequences for the environment depending on how they are used.

Reduction/removal/reorientation of disincentives and market distortions

46. One of the most direct ways of making improving price signals is to make existing markets work better by changing present support systems which contribute to pricing problems by undervaluing resources and creating market distortions.

47. The most familiar case is that of the Amazon region of Brazil, where fiscal incentives and subsidized credit were designed to encourage human settlements, cattle ranching and agricultural activities in the region. This policy encouraged conversion of forests to pasture land, thereby leading to extensive deforestation. Discontinuation of such policies has been an important part of the Brazilian Government's efforts to reverse this phenomenon.

48. The large agricultural subsidies available in both developed and developing countries also encourage a general overuse of chemicals, leading to degradation of soils and the loss of its fertile capacity. Some significant steps have been taken in many developing countries, among them Indonesia, Morocco, Pakistan, to reduce or eliminate subsidies on pesticides and fertilizers.

49. Another obvious case involves water, where oversubsidization has led to inefficiencies by encouraging expansion of supply rather than rational use. For this reason China, for example, recently took the important step of shifting its system of water grants to one based on loans and charges.

50. The reduction of direct and indirect energy subsidies is also a key to promoting energy efficiency and sustainability.

Financial Incentives

51. In general subsidies are regarded as a costly and frequently inefficient policy instrument.

52. The use of subsidies is also constrained by the principle that users and polluters should bear the costs of pollution. However there are circumstances in which the provision of such assistance may be desirable.

53. While subject to a range of interpretations, the Polluter Pays principle as it has developed in industrialized countries explicitly recognizes three circumstances in which the use of subsidies for environmental purposes is acceptable: in cases of severe difficulty, where well defined transition periods are involved, or where significant distortions in international trade and investment are not likely to be created.

54. Financial incentives can therefore play an important positive role in encouraging the introduction of environmentally sound technologies and other forms of environmentally friendly behaviour, and this practice is understood to be widespread. Such incentives can be provided through either the expenditure system and the tax system, and can take various forms:

55. **Grants** or other non-repayable forms of assistance, such as those now provided through the United States Construction Grant program to facilitate the introduction of municipal waste treatment systems.

56. **Soft loans**, whereby interest rates are set below the market rate, such as the loan fund established in Belgium to encourage reparation of damages caused by tapping of underground aquifers, or the loans for relocation of industry provided in Turkey.

57. **Special funds,** such as the waste fund, chemicals fund and fuel environment fund which have been developed in Sweden and financed by environmental charges. A waste fund financed partly by the private sector is also being developed in Thailand.

58. **Tax credits,** such as those now offered in a number of countries as incentives for the development of renewable energy (e.g. in Denmark for the production of wind energy, in the United States to stimulate solar energy production, and in Austria Denmark, Finland, France, the Netherlands and Sweden for the development of biomass), or for industries that use recycled materials.

59. **Other forms of preferential tax treatment** such as tax reductions or allowances for accelerated depreciation. In the United States municipal bonds issued for the construction of solid waste treatment plants or plants capable of burning municipal solid waste for the general of heat and power are exempt from payment of federal and State income tax. In Poland a tax reduction is granted if a by-product production is started that will use wastes, scrap or low quality materials. Some countries (Philippines, Yugoslavia) provide tax exemptions for the import of pollution control equipment.

60. Subsidies also have a potentially important social policy and equity role to play in facilitating the process of adjustment to sustainable development in cases where this may temporarily disadvantage some groups. Reduction of price supports for agriculture could for example be coupled with a shift to support linked to the adoption of sustainable development practices. There may also be cases for special assistance to low income groups, for example to encourage the adoption of energy effiency.

c) Environmental charges and taxes

61. Environmental charges and taxes have played an increasingly important role in the policies of many governments ever since the late 1960's, when they began to be put in place to recover some of the costs of environmental protection in the field of water management.

62. Thus far the main impact of such charges and taxes has been to recover some of the costs of pollution control consistent with the polluter pays and user pays principles, while generating revenue which have helped to finance the growing cost of environmental protection.

63. Ideally charge rates should reflect the marginal social cost of environmentally damaging activities, but this is not always easy to achieve. They also influence prices by providing an indirect dollar incentive to shift away from certain polluting activities in favour of less polluting activies or the development of new environmentally friendly technologies.

64. Studies to date suggest that in most cases rates have not been set sufficiently high to have much incentive impact. However the use of charges and taxes for incentive purposes appears to be growing.

Administrative charges

65. Use of licences and fees to recover the costs of administering pollution control systems is widespread and applies to such things as the licensing of waste disposal sites, the disposing of radioactive wastes, and the control of chemicals.

User charges

66. There is also a large and growing practice of using charges to recover not only administrative costs but also the costs of pollution control. Thus far such charges have been applied mainly to sewerage and water management. There is growing interest in making greater use of solid waste pricing systems to provide incentives for waste reduction, although care needs to be taken to ensure these are not set so high that they encourage illegal dumping.

67. However they are beginning to play a role in dealing with problems of traffic and congestion, such as charges on vehicle traffic in the city centre in peak periods applied in Singapore, or the proposal under study in Switzerland for a kilometre based charge on truck highway usage.

Effluent and emission charges

68. The practice of applying charges to effluents and emissions, first introduced in a major way in France, to control water effluents in a large number of countries has also become widespread.

69. While charges have been a reasonably successful way of dealing with water pollution, they have not played an important role in air pollution, probably because there is no possibility of collective treatment. There have however been some recent applications of charges on emissions of CFC's and nitrogen oxides.

70. Japan has introduced a system of air and water charges which compensates victims of pollution related ailments. In China emission fees are linked to pollution control investment.

Product charges

71. Charges are also being applied to an increasing range of environmentally damaging products.

72. These can be applied to inputs in the production process, such as the charges which have been applied by some European countries to fertilizers and pesticides as part of strategies for dealing with the damaging impact of discharges of nutrients by agriculture.

73. Similarly, they can be attached to products or services sold, such as the growing number of charges which are being applied to items which pose particularly difficult or costly disposal problems, such as waste oil, tires, lead acid batteries, and non-returnable containers.

Tax differentiation

74. It is also possible to apply different rates to products depending on their degree of environmental acceptability.

75. This approach is noted for its success in discouraging the use of leaded gasoline and encouraging a consumer shift toward unleaded fuels and the creation of a new market for this type of fuel.

76. This has encouraged the application of tax differentiation to other areas: Norway, Sweden and the Netherlands for example now use forms of differentiated taxes to encourage purchase of cleaner cars, and Germany takes a similar approach to annual vehicle taxes.

Carbon and energy taxes

77. Recently, particular attention has been paid to the role of so called "carbon taxes". These have now been adopted in three countries (Sweden, the Netherlands, and Finland) and are under active consideration in others, notably the European Community, Switzerland and Norway.

78. To date these taxes have operated generally as a combination of taxes on the carbon content of fuel (emission taxes) and taxes on energy consumption (product taxes), with particular reference to fuels used in transportation.

79. The potential use of carbon taxes to address the problem of global warning is under discussion in the context of the Climate Change negotiations. Some form of global carbon tax has also been identified as a possible source of additional financing for promoting sustainable development objectives in developing countries.

d) Deposit refund systems

80. Deposit refund systems operate like charges except that consumers pay a surcharge which is subsequently refunded when products are returned to a collection system.f First developed by the beverage industry for economic reasons, they have proved to be a particularly successful way of creating incentives for voluntary return of bottles.

81. The success of this approach has encouraged its adoption in a growing number of waste collection and recycling problems ranging from metal and other containers to car hulks, tires and batteries, and similar principles may have broad application to solutions to some waste management and recycling issues such as the disposal of pesticide containers.

e) New market creation

82. Governments can also use market principles to encourage the creation of new markets in pollution control and resource management.

Tradeable permits for air pollution control

83. The most obvious example of this approach is the development of tradeable permits systems (or marketable permits, or emissions trading as they are sometimes also called). In principle this involves setting limits on total allowable emissions within a geographic area; permits are then allocated to industry which is permitted to trade them with other companies or to offset higher emissions in their own facilities. Assuming that firms minimize their total production costs and that the market for these permits is competitive, the resulting level of pollution control will be achieved in the most cost effective manner.

84. First developed in the United States as a way of dealing with the phase out of lead, tradeable permits have become a cornerstone of the United States approach to air pollution, including the reduction of ozone depleting substances and control of sulphur dioxide. There they are reported to achieve large cost savings in the billions of dollars. However they also carry a requirement for sophisticated monitoring and compliance system, and for ways of determining the basis for the allocation of permits.

85. The potential applicability of the tradeable emissions approach to the problem of greenhouse gases is currently under active examination by many governments in the context of the Climate Change convention; this would involve establishing some internationally agreed level of acceptable emissions and allocating "emission rights" to countries or regions under some formula to be determined.

Water markets

86. While the tradeable permit approach has not been important in the control of water pollution, it may be possible to utilize market principles to encourage the development of new markets which will help to reduce water use and conserve scarce water supplies.

87. The United Kingdom, for example, recently moved in this direction through privatisation of its water industry, thereby making the cost of using water and the scale of investment needed to provide consumers with good quality water and waste disposal more apparent. Privatization is not the answer to every environmental problem, and in some cases would have negative implications.

In the western United States there is growing experience with the creation of limited sales and lease markets for water among irrigation users, and between urban and rural users. Some innovations in this area are also taking place in Australia.

88. The tradeable permits approach may also have broader applications; for example, in New Zealand it is being used to develop more effective management of fisheries.

Auctions and bidding

89. Auctions and tenders can also be part of efforts to introduce market principles into resource allocation; in an effort to reduce the use of CFC's Singapore has introduced auctions for permission to use CFC'S. In the United States, the possibility has been raised of introducing least cost bidding as a way of encouraging more energy conservation by the electricity industry.

f) Enforcement incentives

90. Regulatory requirements are normally enforced through the prospect of judicial sanctions. The incentive to comply can be enhanced through the introduction of a financial element or penalty. This may be particularly applicable to some environmental problems, or in countries where the prospect of judicial action alone is unlikely to provide sufficient deterrent.

91. **Non-compliance fees**, imposed if polluters fail to comply with required standards, are widely imposed. In Mexico such fees are adjusted for inflation in order to remove any possible financial reason for seeking to delay payment.

92. **Performance bonds** are imposed before activity begins, as for example in the case of offshore drilling in Canada and the United States.

93. There may be scope for broader application of such measures with respect for example to rehabilitation of lands following development activity.

g) Liability insurance and compensation funds

94. Strict liability and liability insurance as an economic instrument is just beginning to be explored. However it appears that legally establishing liability of polluters for environmental damage or cleanup costs may lead to the creation of a market in which risks of damage penalties are transferred to insurance companies, thereby creating incentives in the form of the possibility of premiums in the case of industrial processes which are more secure or result in less damage, less waste and fewer accidents. Several European countries have passed legislation making it compulsory to take out liability insurance or provide financial guarantees for certain types of hazardous activity (e.g. nuclear facilities, oil pipelines, carriers and disposers of hazardous substances or wastes).

95. Liability insurance may not be adequate in exceptional cases involving very small or insolvent companies, or if the source involved cannot be traced. In order to ensure that full compensation is available compensation schemes have been set up in some countries (Netherlands, Sweden) to supplement conventional insurance. Similarly, the International Oil Pollution Compensation Fund, financed through industry contributions, provides supplementary compensation in the event of oil pollution accidents at sea. Such funds benefit industry by reducing premium costs, and if industry financed also internalise pollution damage and other costs associated with environmental cleanup.

h) Labelling

96. If consumers are to make informed choices in the marketplace it is important that they be equipped with knowledge about the environmental impact of various products. Energy and other "eco-labelling" is therefore becoming an important instrument, either as a government requirement or as a result of voluntary action by industry.

IV. GREATER RELIANCE ON ECONOMIC INSTRUMENTS: SOME KEY CONSIDERATIONS

97. There appears to be growing support for the view that economic instruments, carefully chosen in the context of specific issues, will in many cases be able to achieve greater levels of environmental protection and conservation at lower total costs to society than is possible with regulatory approaches alone. They also seem more likely than regulation to lead consumers and producers to consider the true costs of their decisions, to rationalize the use of natural resources, to encourage techological innovation, and ultimately to bring about better integration of environmental and economic goals.

98. Economic instruments are not however always easily implimented. They imply a willingness on the part of governments to change long-standing policies and practices, as well as acceptance on the part of the public and industry of tax, expenditure and other regimes in which the costs and benefits of the environment tend to be more apparent than they are under conventional command control/regulatory approaches. Some countries, because of their particular political, economic and institutional structures, will find this apprach more attractive than others.

99. The following is a brief summary of some general considerations which need to be taken into account in developing effective strategies involving the expanded use of economic instruments.

a) Improving understanding of economic instruments

100. The main barriers to expanded use of economic instruments are a traditional preference for regulation coupled with concern that they provide less certainty and predictability in achieving environmental goals; questions about how the revenue raised by charges will be used; and a concern to ensure that they really do result in more economic efficiency without imposing additional financial or administrative burdens or problems for international competitiveness.

101. Improving general knowledge and understanding of how economic instruments operate and evaluating their effectiveness may help to deal with some of these concerns.

b) Developing a broader policy

102. Although economic instruments have sometimes been perceived as alternatives to conventional command and control/regulatory approaches, experience with them to date suggests that they have in most cases been

implemented in combination with regulation in some form, and that they have almost never replaced it. It also appears that there may be some issues, such as control of certain toxic or hazardous substances, which may be more suitable to regulation than others, such as technology innovation, which can be dealt with more effectively through the use of economic instruments.

103. The challenge therefore is to make more active and creative use of economic instruments and market approaches, together with regulation and voluntary appraoches in ways which promise most effectiveness and efficiency in dealing with particular issues.

c) Reorienting taxation policies

104. The evolution of a new family of "eco - taxes" is leading to interest in some countries in examining the role of taxation systems generally in dealing with environment related problems. Sweden for example introduced environmental taxation measures in the context of a broader reform of personal and corporate income taxes, and a review of environmental taxation has been under way in Norway and under consideration in others. The OECD is undertaking a special environmental taxation study.

105. The Asian Development Bank report referred to earlier also drew attention to the need to review taxation and revenue policies to identify previously unrecognized environmental impacts, and to generate revenues for locally administered environmental improvement programmes and the enforcement of regulatory measures. It also identified the need for more attention to the potential role of property taxes.

106. In view of understandable concerns about taxation, attention is focusing on how revenues generated by environmental charges and taxes can be used to support environmental objectives, and on any possible distributive implications of environmental taxes among income groups.

107. Ultimately, taxation systems may need to be made more conducive to the pursuit of sustainable development goals by shifting them away from socially beneficial activities such as saving, risk taking and work, and toward environmentally detrimental activities like pollution and congestion.

d) Integrating economic, environmental and sectoral policies

108. Economic instruments taken in one sector frequently have impacts in others. Measures adopted in the energy field, for example often have implications for transportation and for industry generally. Measures to deal with agriculture can affect forestry, water and land.

109. It is therefore important that economic instruments be designed to facilitate the integration of environmental policies with sectoral and other policies.

110. This also underlines the need for much closer integration of decision making processes among government ministries and agencies than has taken place in most countries in the past.

e) Ensuring international competitiveness

111. The trade implications of greater reliance on charges, incentives and pricing mechanisms to deal with environment related issues is only beginning to be assessed. In general, however, the impact of the economic instruments and market mechanisms adopted to date has been essentially domestic, and they have not given rise to serious trade concerns. Indeed in principle such approaches seem no more prone to give rise to non-tariff barriers to trade than regulation, and may even be less inclined to do so because their primary effects are on domestic costs rather than on traded products.

112. However increased reliance on economic instruments, especially if they begin to impact internationally, will create a need to assess these carefully in order to ensure that the positive benefits of utilizing economic instruments are not undermined by the creation of new trade barriers and distortions.

113. Broader issues involving the relationship between the environment, development and international economy is addressed separately in the paper on the international economy.

g) Incorporating economic instruments in adjustment lending

114. According to World Bank reports, measures to protect and enhance the environment are also playing an important role in sectoral and structural adjustment lending programs designed to restore economic growth under conditions of internal and external financial stability.

115. Such loans have involved improved management and price incentives to control waste and the volume of cutting in forests (Ghana); elimination of log export quotas and reform of fiscal policies in the logging and wood processing sector (Côte d'Ivoire); the introduction of logging permits and user fees and the creation of a logging fund financed by domestic taxes and foreign resources to implement programs for the protection of natural resources, forest and park management and reforestation (Central African Republic).

116. Other conditions which have typically been included in World Bank project lending include measures for the elimination or reduction of pesticides and full cost recovery in pricing energy or water services.

117. However while the use of economic instruments in the context of policy reforms can play an important role in promoting sustainable economic growth in certain circumstances, the need for rapid disbursement may make it inappropriate for implementing complex institutional reforms that require many years. This suggests the need for approaches which combine an investment component with a rapidly dispersing component.

118. The desirability of developing new international financial instruments to deal with environment and development issues has been highlighted in a large number of studies and reports; this is addressed separately in the papers on the international economy and financial issues.

h) Addressing property rights

119. Consideration also needs to be given in some cases to the associated legal question of the role of individual and communcal property rights in providing incentives for environmentally sound behaviour. This assumes that people will attach a higher value and take better care of resources over which they have some form of ownership, than if these appear simply as free goods. The need to incorporate externalities may also require a re-examination of property rights in some cases so that such rights are circumscribed by rules that take into account the impact of property use on others.

120. The role of private property is a significant element in the capacity to make use of economic instruments and market approaches in some circumstances. In eastern Europe, for example, the underdevelopment or complete absence of a market for land and especially for natural resources appears to make it difficult if not impossible to use market oriented approaches.

V. THE SPECIAL NEEDS OF DEVELOPING COUNTRIES AND ECONOMIES IN TRANSITION

a) Capacity building

121. The effective utilization of economic instruments depends upon the existence of the necessary institutional structure to implement them, in the form of taxation systems, monitoring and evaluation capabilities and human resources. While this is true of all countries, it is particularly relevant in the case of developing countries and countries in transition to market based economies, which in most cases do not have the same economic and institutional structure and experience in dealing with market oriented systems as industrialized countries. These countries also face special problems which call for different ways of utilizing such approaches.

122. At the same time, developing countries have the opportunity to use economic instruments and market mechanisms in the process of structural adjustment of their economies to ensure that future growth is based on the most sustainable use of resources. Similarly, countries which have moved away from centrally planned command control approaches to decision making are confronted with a unique opportunity to ensure that these incorporate effective environmentally oriented market mechanisms.

123. Efforts to build capacity in developing countries and countries in transition to deal with the problems of environment and development should therefore take account of the need to enhance their capacity to utilize economic instruments in designing appropriate approaches to their particular problems.

b) Sharing experience on successful applications of economic instruments

124. For all governments, the utilization of economic instruments and market oriented approaches is still in its early stages. There is therefore a general need for sharing information on such measures, and on what does and does not work.

125. Discussion of the use of economic instruments and market approaches in industrialized countries is relatively well advanced, and a set of guidelines for their application has been prepared by the OECD.

126. Less is known about the application of such approaches in developing countries and in economies in transition.

127. Strengthening information sharing on successful applications of economic instruments, with particular reference to developing countries and to economies and transition, could therefore substantially enhance the capacity of all governments to make more effective use of such approaches.

VI. AGENDA 21: THE POTENTIAL APPLICATION OF ECONOMIC INSTRUMENTS TO KEY ISSUES

128. Economic instruments and market mechanisms are a key element in the development of proposals for dealing with many of the key issues before the 1992 Conference on Environment and Development. Many ideas are being generated by economists and others about how such instruments could be utilized in future environment and development strategies.

129. The Secretariat has therefore prepared a brief outline of a range of key options available to governments in connection with the issues before the Conference.

130. These options, which are a combination of measures now being utilized in some countries plus users which have been identified by economists and in the work of the Working Groups, are provided at this stage for the information of the Preparatory Committee. They will be developed further in the preparations for the 4th Preparatory Conference.

VII. ANTICIPATED ACTIVITIES

a) International organizations and private institutions

131. The role of economic instruments and market mechanisms is being actively pursued in various international organizations, notably the OECD and the ECE, as well as the World Bank and some of the regional development banks. It is also being actively studied by a number of private institutions and private economists.

132. During the last few years, several general studies have been completed concerning the role of economic instruments in the field of environmental protection in industrialized countries, and resource pricing issues. There have also been a number of case studies, mainly involving developing countries.

133. Attention now appears to be shifting to examinations of the potential application of economic instruments and market mechanisms to specific areas, e.g. atmospheric pollution in the context of the Climate Change negotiations, and the role of environmental taxation.

134. The Preparatory Committee may consider recommending that international organizations pursue the role of economic instruments and market approaches in several ways:

- by examining further the utilization and effectiveness of economic instruments and market mechanisms, with particular reference to their role in developing countries and countries with economies in transition;

- by taking into account information provided in National Reports as they are received; and

- by developing further the range of possible options for the use of economic instruments in the context of specific sectoral programmes.

VIII. ISSUES FOR DISCUSSION AT THE 3RD PREPARATORY CONFERENCE

135. The Preparatory Committee may wish to comment on how the role of economic instruments and mechanisms can best be included in the development of Agenda 21.

136. The extent to which economic instruments are used, and the choice of particular instruments, is of course essentially a matter for governments themselves to decide in keeping with their particular political and economic structures, the nature of the problems they face, and their international commitments.

137. In general there appears to be a consensus that much greater integration of economic and environmental decision making is going to be needed in future.

138. The main issue therefore is how to advance the utilization of economic instruments and market oriented approaches as one of the key ways of bringing this about.

139. In particular, and taking into account the growing interest in this approach which is developing at the international level, the Preparatory Committee may wish to comment on the following possible approach:

- Governments could resolve to make more active use of economic instruments and market oriented approaches in addition to regulation in their environment and development strategies;

- They could undertake to review their domestic policies to determine how the use of economic instruments and market oriented approaches can help to deal with environment and development problems in certain key areas, e.g.:

  - atmospheric pollution

  - waste management and recycling

  - resource pricing and resource management (including water, energy, forestry, agriculture, land)

  - investment and technology development

- They could also request one or more international organizations to serve as a clearinghouse for the sharing of information on successful applications of economic instruments and the provision of technical knowledge and expertise, recognizing the need for particular attention to the special circumstances of developing countries and economies in transition.

SOME KEY OPTIONS AVAILABLE FOR ADDRESSING ISSUES BEFORE THE 1992 UNITED NATIONS CONFERENCE ON ENVIRONMENT AND DEVELOPMENT

POLICY OBJECTIVES	INSTRUMENT (Options)	ENVIRONMENT AND DEVELOPMENT IMPACT
ATMOSPHERE		
- Reduce atmospheric pollutants (e.g. global warming, ozone, acid rain)	Emission charges (SO2, NOx, CFC's, etc.)	Internalize the marginal cost of air pollution while creating incentives to reduce emissions
	Carbon taxes (taxes on the carbon content of fuels)	Create incentives for reducing the use of fossil fuels vis-a-vis less polluting fuels
	Tradeable permit systems	Create new markets in pollution permits/rights to encourage cost effectiveness
- Improve energy efficiency and sustainability	Reduction/removal of unwarranted energy subsidies	Move toward more realistic energy pricing
	Energy taxes	Create incentives for reduced reliance on energy
	Energy pricing	Move toward incorporation of the full marginal cost of providing energy
	Energy labelling	Provide individuals with knowledge needed to make informed decisions about energy use
- Encourage development of renewable energy	Financial incentives, fuel funds	Create incentives for shift toward energy conserving fuels by home owners, industry especially low income groups
- Promote more efficient and environmentally friendly transportation systems	Tax differentiation	Create incentives for cleaner automobiles

	Inner city traffic charges	Create incentives for reduction of traffic congestion
- Encourage development of renewable energy sources	Subsidies (tax credits, rebates)	Create incentive for development and introduction of new technologies (e.g., wind, solar, biomass)
FRESHWATER		
- Improve water quality	Emission and effluent charges	Internalize costs of pollution control and provide incentive to reduce discharges
- Promote efficient water use and conservation	Water pricing	Incorporate into water prices the full marginal social cost of providing water
	Reduction/removal of subsidies	Remove inefficiencies in water use and irrigation which distort the real price of water and inhibit rational use
	Limited sale and lease markets	Provide scope for voluntary transfers of water rights among rural users and between rural and urban users to encourage most valuable use of water
OCEANS		
- Prevent toxic and other hazardous spills	Performance bonds	Provide financial incentive in addition to judicial sanctions
	Charges for transport of hazardous wastes	
- Ensure adequate compensation to victims of oil spills	International Oil Pollution Compensation Fund	Provide supplementary compensation in rare cases where private liability insurance is inadequate

- Improve coastal zone management	Reduction/removal of subsidies for development	Reduce development pressures
- Improve control of discharges and shipboard wastes	International levy system (with fees collected from ship-owners and shipping interests based on the volume and hazard associated with cargo handled)	Finance construction of port facilities for the reception of wastes (e.g., oil, hazardous and toxic substances, sewage, plastics, et.), while internalizing the maximal costs of pollution control
WASTES		
- Encourage a shift from pollution control to pollution prevention	Solid waste pricing systems (based on the marginal cost of providing services)	Create incentives for waste reduction, while internalizing the costs of waste treatment (provided rates do not encourage illegal dumping)
	Variable garbage rates	
- Encourage the use of waste treatment	Subsidies (grants, loans, tax incentives)	Expand municipal waste treatment facilities
	Tax reductions, exemptions (e.g. of municipal bonds issued to finance construction of waste treatment facilities	
- Encourage recycling	Deposit refund systems	Create incentives for voluntary recycling through application to an expanded range of products (e.g. metal cans, car hulks, newspaper, glass and plastics, batteries, pesticide containers, in addition to bottles and beverage containers)

- Improve management of products which are difficult to dispose of	Charges	Recover costs associated with troublesome products (e.g. waste oil, feedstock, pesticides, fertilizer, tires, batteries, non-returnable containers), while providing incentives to curb their use (if rates set sufficiently high)
- Encourage waste reduction technologies	Subsidies (grants, loans, tax incentives)	Create incentives for industry innovation
- Reduce risks associated with hazardous accidents	Liability insurance	Develop new markets for liability insurance with incentives for lower premiums
	Compensation funds financed through industry levies	Ensure full compensation available to victims of accidents in situations where private liability insurance is insufficient
BIODIVERSITY		
- Promote diversity of plant and animal life	Debt for nature swaps	Involves purchase of a portion if a country's debt in return for environmental action
LAND		
- Promote sustainable agriculture	Reduction of large scale agricultural subsidies	Remove market distortions through better pricing. De-link agricultural supports from income supports for producers. Link future subsidies to introduction of environmentally sustainable forms of agriculture
- Reduce overuse of agricultural chemicals on land and water	Reduction/elimination of pesticides and fertilizer subsidies	Discourage overuse through more appropriate pricing

- Promote sustainable forestry	Royalties, licences, permits, fees based on market values	Recover environmental value of forests and create incentives for sustainable management
	Competitive bidding for harvest rights	
	Subsidies (tax incentives and other financial assistance)	Encourage reforestation
	Debt for nature swaps	
- Promote sustainable use of land	Reduction/elimination of subsidies and tax breaks	Internalize the cost of environmentally damaging activities into the price of land
	Charges, taxes	Discourage the clearance of marginal land. (Can be coupled with financial support for the poor)
	Property taxes	Influence the pattern of land use where the market is inadequate
	Depletion taxes	Restore depleted eco-systems following development
	Performance bonds	
	Subsidies (grants, loans, tax incentives)	Stimulate reclamation and investment in derelict lands

ANNEX 2

RECENT INTERNATIONAL DECLARATIONS AND POLICY STATEMENTS
RELATING TO THE UTILIZATION OF ECONOMIC INSTRUMENTS (EXTRACTS)

1989

. Recognizing that our shared environment binds all countries to a common future, we, the Heads of Government of the Commonwealth, resolve to act collectively and individually, commit ourselves to (the following programme of action):

- advance policies and programmes which help achieve sustainable development, including the development of new and better techniques in integrating the environmental dimension in economic decision making...

... The Langkawi Declaration on Environment of the Commonwealth Heads of Government Meeting, 18 - 24 October 1989, Kuala Lumpur

1990

. (Resolved:) To integrate environmental considerations with economic and sectoral planning and policies and to encourage all relevant institutions to be accountable for evaluating environmental effects of their programmes and policies;

. To make more extensive use of economic instruments in conjunction with a balanced mix of regulatory approaches in order to increase efficiency of environmental protection, of the use of natural resources and of energy consumption. Such instruments may include;

- taxes on environmentally damaging activities and products or energy inefficient products;

- reduction or, wherever possible, elimination of subsidies to resource intensive or environmentally damaging activities;

- other measures such as emission charges and fees, deposit refund systems and tradeable permits and fiscal incentives;

Such actions would make prices, particularly those related to energy, reflect environmental costs and benefits, and thus serve as market signals and provide incentives. They would modify production and consumption patterns and encourage use of environmentally sound and energy efficient technologies.

- to work towards a coordinated approach to the use of economic instruments which would be facilitated by guidelines and studies by international organizations, particularly the OECD, ECE and EC. In this context, we welcome the OECD's work on preparing principles and international guidelines which will be presented to its meeting of Environment Ministers in 1991.

... Bergen Ministerial Declaration on Sustainable Development in the ECE Region

. In order to integrate successfully environmental and economic goals, decision-makers in government and industry require the necessary tools..... We encourage the OECD to accelerate its very useful work on environment and the economy. Of particular importance are the early development of environmental indicators and the design of market-oriented approaches that can be used to achieve environmental objectives... We support voluntary environmental labelling as a useful market mechanism which satisfies consumer demand and producer requirements and promotes market innovation.

... Declaration of the Economic Summit, Houston, Texas, June 1990

. The external trade and payments regime has a significant impact on the environment, partly through its indirect effects in determining the overall pace of economic development;

. Pricing policies are recognized in theory as a powerful, perhaps even an essential, ally of regulatory measures; there is a need to test this idea more fully in practice;

. Tax and revenue policies should be reviewed to identify previously unrecognized environmental impacts and revised to generate revenues for locally administered environmental improvement programs as well as to re-enforce regulatory measures;

. Public expenditure policies, which must constantly adjust to new national priorities, now need to be reviewed to give greater attention to environmental impacts.

... Ministerial Brief, Conference on Environment and Development in Asia and the Pacific, 10 - 16 October, Bangkok, Thailand

. Appropriate economic instruments may offer the potential for achieving environmental improvements in a cost-effective manner. The adoption of any form of economic or regulatory measures would require careful and substantive analyses. We recommend that relevant policies make use of economic instruments appropriate to each country's socio-economic conditions in conjunction with a balanced mix of regulatory approaches.

... Ministerial Declaration, Second World Climate Conference, Geneva, 29 October - 7 November 1990

. As part of the economic and social policy for sustainable development, an internal financing policy should be instrumented to make it possible to mobilize the necessary funds, especially those earmarked for sectors selected as the most dynamic. To that end, measures such as the following are proposed:

- maintenance of a real, high, and stable exchange rate
- more efficient operation of the financial system
- tax reforms to prevent tax evasion, and firmer assessment of individuals in whom income is concentrated
- creation of ad hoc financing institutions for programs of environmental conservation, technological development, and better housing.

. Within the general framework of State reform and measured action ... redefinition of the state's role in the economy must foster pursuit of the following objectives, according to the institutional features of each country ... more strategic and selective State intervention in the economy, through market compatible mechanisms, State promotion of scientific and technological development, consideration of the ecological dimension in the State's formulation of its economic policies.

... Our Own Agenda, Latin American and Caribbean Commission on Development and Environment (Inter-American Development Bank and the United Nations Development Programme)

1991

. Ministers affirmed that a key to sustainable development, and thus to ensuring sound environmental management, lies in the full integration of economic and environmental policies. They proposed the following principles to guide action by OECD governments:

- There is a fundamental link between economic growth and the environment. Economic and environmental policies cannot be made and implemented in isolation;

- Environmental consideration must be brought to bear systematically on economic policy-making;

- Conversely, sound economic analysis of costs and benefits and their distribution, coupled with scientific assessment of relative risks, is the optimal basis for setting priorities among environmental goals and choices;

- Compatibility between environmental and sectoral economic policies should be a central objective of policy makers; and subjected to continuous monitoring and evaluation;

- Economic instruments, used in conjunction with regulation, are important tools for achieving policy integration;

- International consultation and coordination is essential to ensure that national environmental policies, whether regulatory or market-based, do not give rise to unwarranted or inappropriate constraints to national competitiveness or international trade.

. Ministers called for improved policy integration in all economic sectors. They welcomed efforts by a growing number of specialised governmental departments to strengthen their capacity for environmental analysis and planning; and urged the OECD to continue to examine government policies which might conflict with environmentally sustainable growth. Ministers underlined the need for governments to identify and eliminate those subsidies, taxes or other market interventions that distort the use of environmental resources, thereby impacting adversely on environmental policy objectives.

. Ministers identified four sectors in which improved policy integration and a consistent application of the Polluter Pays Principle offer substantial rewards: Energy.... Agriculture.... Transport... Coastal Zone Management.

. Successful policy integration, and the attainment of sustainable development, is critically dependent on assigning prices to raw materials, goods and services that better reflect their full environmental and social costs. Ministers called upon the OECD to continue its work on pricing policy, in particular to assess the economic and environmental consequences of modified prices, including the implications for trade and industry.

. Ministers welcomed, and strongly supported, the recent expansion in OECD countries of the use of economic instruments (e.g. taxes, charges and tradable permits) to achieve environmental objectives. Economic instruments can provide strong incentives for technological innovation and behavioral change, and offer good prospects for achieving environmental objectives in a cost- effective manner... They urged the OECD to promote and monitor their use by governments, and to carry out detailed analyses of country experiences to establish the best practical applications of various instruments, including application to transboundary and global environmental problems.

. Tax reform may offer good opportunities for promoting the use of economic instruments. A number of OECD governments are considering changes in their tax systems specifically to achieve environmental objectives, including the introduction of environmental charges and the reduction of other taxes to increase overall efficiency and public acceptability. Ministers called upon the OECD to examine possibilities for adapting taxation systems to achieve both socio-economic and environmental objectives without excessive administrative complexity.

. Ministers agreed that government regulation will continue to be an important tool for environmental policy-making. Regulatory approaches will, however, have to be continually reviewed and modified to keep pace with evolving approaches to environmental protection. These include the

growing emphasis on comprehensive strategies, embodying such concepts as integrated pollution prevention and control, life cycle management and integrated natural resource management. Ministers emphasized the need to utilize economic instruments and regulation in an integrated, reinforcing fashion.

... Communiqué, OECD Environment Committee at Ministerial Level, Paris, January, 1991

. Centralized government regulation can never be enough to protect the environment. Some of this type of regulation is needed, and must be constantly updated to keep pace with technological and industrial development. But government regulation needs to be complemented by incentives, fiscal or other, which use normal market dynamics to achieve adequate policy and practice. While the market can respond efficiently to private sector conditions, the environment is largely a public asset. Setting the conditions in which a proportion of productive capacity is devoted to preserving that asset is a broader responsibility. That responsibility can, however, be met by incentives which are in tune with the basic focus of the market economy.

. Fiscal policies will provide some help. For example a significant increase in energy costs for certain sectors would promote energy saving policies and challenge the innovative and adaptive skills of industry to find more economic alternatives. Business should consider this role in pressing such policies.

... Business and Environment, the Problem and the Opportunity, World Wide Fund for Nature

. The Ministers and the Senior Officials attending the Fourth Session of the Senior Advisers to ECE Governments ... agree that when developing a revised agenda ... take into account the following measures aimed at promoting the implementation of the Bergen Ministerial declaration ... and pertinent decisions of the ECE including:

- The integration of environmental and economic objectives in decision-making;

- Fostering the linkages between environment, technology, transport and energy policies;

- Promoting the use of economic instruments ...

... Ministerial Statement, Fourth Session of the Senior Advisers to ECE Governments on Environmental and Water Problems, Espoo, Finland, 25 to 26 February 1991

. We believe that progress towards sustainable development can best be achieved by working within the framework of the market economy, and adapting it to reflect environmental concerns more appropriately. The focus should be on incentives that encourage both sound business development and environmental protection.

. We urge all governments to move towards performance based policies, since they encourage initiative and innovation in both the private and public sectors for meeting agreed environmental goals at the lowest cost.

. To enable us to implement our initiative in the most efficient manner, and to maximize our contributions towards sustainable development, we urge Governments to.... encourage the use of market instruments and cooperate with industry and others in formulating energy and environmental policies so that the most effective market environment is created...(and) ... give priority to incentives and performance-based environmental standards and regulations, leaving industry to select the best means of meeting them...(and)... explore with industry and international organizations the additional funding mechanisms and other incentives necessary to make technology available to users unable to pay for it...

... Final Declaration, Second World Industry Conference on Environmental Management, Rotterdam, 10 - 12 April 1991

. Ministers agree that OECD countries should pursue an environment strategy for the 1990's based on integrating economic and environmental decision making, improving their environmental performance, and strengthening international cooperation.

. Ministers welcome the direction and impetus given by the Environment Ministers to strengthening the integration of economic and environment policies as a key to sustainable development. They agree with the principles proposed for working towards this objective: economic and environmental policies cannot be made and implemented in isolation; environmental considerations must be brought to bear systematically on economic policy-making; sound economic analysis of costs and benefits, coupled with scientific assessment of relative risks including that of inaction, is the optimal basis for setting priorities among environmental goals, and compatibility between environmental and sectoral economic policies should be a central objective of policy-makers. Ministers call for improved integration of environment considerations into all economic sectors and for the OECD to continue its work on analyzing the policy interconnections. They agree that effective policy integration will require a greater degree of dialogue with and participation from all sectors of society and the economy if environmental goals are to be met effectively and efficiently and to prevent policy conflicts from arising in such areas as agriculture, coastal zone management, energy, and transport and more generally on trade and investment. Ministers also support additional work on "OECD guidelines" to assist Member countries to make more effective and widespread use of economic instruments.

... Ministerial Communiqué, OECD Ministerial meeting, 5 June 1991

. The transition of eastern and central European countries from centrally planned to democratic political systems and market oriented economies is promising, but should also be accompanied by appropriate environmental protection policies and measures. Advantage must be taken of the transition to market economies to introduce ecological aspects into this process from the very beginning.

. The Ministers and the Commissioners stressed that the aim of environmental protection and improvement would best be served by democratic political systems with free market economies where goverments set high environmental standards and appropriate economic and fiscal instruments, and where industry provides the economic growth and the investment to meet those standards. They noted the importance of providing clear signals to industry to foster clean growth ...

... Conclusions of the Conference, "Environment for Europe", Czech and Slovak Republic, 21 - 23 June 1991

ANNEX 3

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